

ABSTRACT OF THE DISCLOSURE

An optical device comprising:

- a quantic well laser with a laser cavity formed by a laser medium between a reflection face (8) and an output face (9) reflecting part of the light energy to the cavity, the curve representing the gain of the cavity as a function of the wavelength having a maximum for a wavelength  $\lambda_{max}$ ,
- means (2, 3, 4) of coupling the laser output to an optical fiber (5), the optical fiber (5) having a fiber network (6) defining a coefficient of a reflection peak for a wavelength  $\lambda$  and reflecting a fraction of the light received from the laser through the fiber, to the laser cavity through coupling means (2, 3, 4), the device being characterized in that the value of the wavelength  $\lambda$  defining the reflection peak of the fiber Bragg network is less than the value of the wavelength  $\lambda_{max}$  by 15 nm plus or minus 5 nm.

This makes operation possible over a wide temperature range.

Fig. 1